

# Impact of EV Manufacturing on Metalworking Fluids: Opportunities and Challenges

**Base Year: 2023**

**To be published:  
Q4 2023**

**1<sup>st</sup> edition**

Electric vehicles (EVs), a disruptive technology, will undoubtedly have a negative impact on the automotive lubricants market. They will also affect metalworking fluids (MWFs) due to a reduction in the number of components and changes in manufacturing processes compared to internal combustion engine (ICE) vehicles.

This report aims at examining how the use of MWFs in automotive (cars and two-wheelers) manufacturing is changing with the growing production of EVs.

**Regional Coverage:** Global

## SCOPE

- › Size and segmentation for global MWFs demand by major fluid type and end-use industry
- › Size and segmentation for MWFs employed in automotive (car and two-wheelers) manufacturing by major fluid type
- › Identification of MWF-intensive auto-component manufacturing
- › Identification of metalworking processes affected by EV manufacturing
- › Future market for MWFs used in automotive (car and two-wheelers) manufacturing
- › Opportunities and challenges for MWF formulators and marketers

## Comparison Between EV and ICE Vehicle Architecture

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## Introduction

## EV Manufacturing

- Market developments and regulations that are driving the production of EVs
- Analysis of EVs (cars and two-wheelers) manufacturing in terms of changes in hardware size and metal alloys used
- Identification of manufacturing processes and auto-components affected (eliminated/substituted/added) by EV manufacturing for cars and two-wheelers
- Description of supply chains at a regional level for key auto-parts impacted by the e-mobility trend
  - Engine/Engine parts
  - ICE transmission system/parts
  - EV electric motors
  - EV transmission system/parts
  - EV battery and housing

## Impact of EVs on MWF

- Definition and description of MWF and its types
- Overall global MWF market size in 2023 by:
  - Major regions
  - Fluid type (removal, forming, protecting, and treating fluids)
  - End-use industries

- Global MWF demand in automotive (car and two-wheeler) manufacturing in 2023
  - Demand by region
  - Demand by vehicle type
  - Demand by fluid type (removal, forming, protecting, and treating fluids)
- Forecast global MWF demand in automotive (car and two-wheeler) manufacturing in 2027
  - Impact on four major fluid types (removal, forming, protecting, and treating fluids) due to change in the vehicle architecture
  - Impact at a regional level for regions manufacturing engine/engine parts, ICE transmission system, EV electric motor, EV transmission system/parts, and EV battery and housing
- Opportunities and challenges by MWF type (removal, forming, protecting and treating fluids)

NOTE: EVs in this report include only battery electric, hybrid electric, plug-in hybrid, and fuel-cell cars, along with electric two-wheelers.



## REPORT BENEFITS

This report serves as an excellent resource for manufacturers and formulators of MWFs in understanding how the growing production of EVs will affect the MWFs market. Specifically, this report assists subscribers by providing:

A snapshot of the global MWFs market by major fluid type

An assessment of EV manufacturing and its impact on MWFs in terms of major processes and auto-parts

A summary of opportunities that might emerge due to the unique component manufacturing requirements of EVs

## METHODOLOGY

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